



Section B:1

Waste Management

PROJECT MANAGERS

G.H. Sanders, RL
(509) 376-6888

E.S. Aromi Jr., WMH
(509) 372-1033

SUMMARY

Waste Management (WM) consists of the Solid Waste Storage and Disposal, Project Baseline Summary (PBS) WM03, Work Breakdown Structure (WBS) 1.2.1; Solid Waste Treatment, PBS WM04, WBS 1.2.2; Liquid Effluents - 200 Area, PBS WM05, WBS 1.2.3.1; and the Waste Encapsulation and Storage Facility, PBS TP02, WBS 1.4.2.

PBS WM05 is divided between WBS 1.2.3.1, Liquid Effluents (200 LEF) and WBS 1.2.3.2, 310 TEDF/340 Facility (300 LEF). The 310 TEDF/340 Facility work scope is included in the River Corridor Project, whereas the Liquid Effluents (200 LEF) work scope remains in Waste Management. For the purpose of performance analysis, PBS WM05 is reported in its entirety in the WM Project, which has the majority of the work scope and funding.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, RL) shows three milestones completed early and one remaining milestone on schedule.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of June 30, 2001. Other data is updated as noted.

NOTABLE ACCOMPLISHMENTS

Accelerate Readiness to Receive Spent Nuclear Fuel (SNF) K Basin Sludge - Canyon activity was suspended and an Unresolved Safety Question (USQ) was declared as a result of an unanticipated tank containing liquid and salt cake in Cell 11L. Improved estimates of volume and nature of tank contents resulted in reassessment by the Plant Review Committee (PRC) and determination that no USQ exists. Fuel removal readiness activities are back on schedule.

Transuranic (TRU) Waste Program Production - Fiscal Year to Date (FYTD) production through July 23, 2001: 764 Nondestructive Examination (NDE), 769 Nondestructive Assay (NDA), 294 Headspace Gas Analysis, 74 Glove box Repackaging, 13 Visual Examinations (VE), 5 shipments made to the Waste Isolation Pilot Plant (WIPP), and 64.4 m³ certified.

A team of Management, Operations, Radiological Control and Engineering completed a program to reduce the time it takes to exit a TRU drum from the WRAP processing facility. The process involved the installation of ventilation devices on the TRU glovebox exit ports, improved work practices and implementing an aggressive air monitoring program to assure that the exits are done safely. The result has been an increase in drum exits from one every two and one half days to two per day.

TRU Program Re-certification/Plutonium Finishing Plant (PFP) Audit: The TRU Program re-certification and PFP audit was completed June 15, 2001. Deficiency Evaluation Group meetings were completed and corrective actions assigned to address the 3 Corrective Action Reports from the audit. Carlsbad DOE is reviewing corrective action plans at this time.

Liquid Waste Processing - From October 1, 2000 through July 23, 2001, 22.0 million gallons of wastewater were processed through the 200 Area Effluent Treatment Facility supporting the Environmental Restoration Contractor 200-UP-1 Groundwater. The Liquid Effluent Retention Facility has received over 120,000 gallons of wastewater through the Effluent Treatment Facility Load-In Facility via tankers.

Support to River Corridor Project (RCP) - Transport and storage of RH-TRU Hittman liners from the 324 B-Cell clean out was completed on July 18, 2001.

Waste Encapsulation and Storage Facility (WESF) Operations - The WESF roof repair was completed on July 6, 2001. WESF received the capsule welding equipment from 324 Facility on June 28, 2001. Twenty-seven (27) specific items used to fabricate Type-W capsules are now stored at WESF and are available if welding on capsules should ever be required.

Land Disposal Restriction (LDR) Report - The CY 2000 LDR report was approved by RL and transmitted to the regulators on June 28, 2001. This transmittal met the requirements of Tri-Party Agreement milestone M-26-01K.

SAFETY

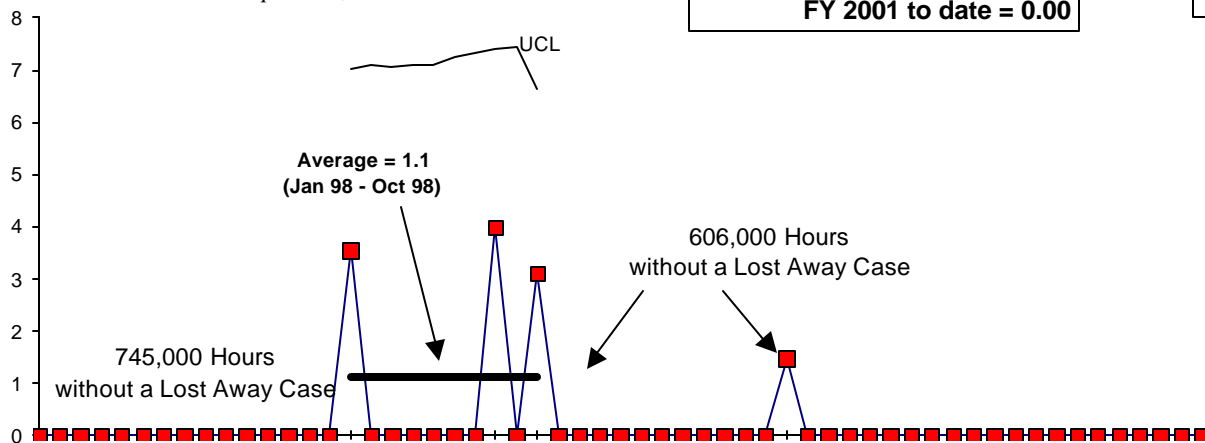
During June, there were no Lost Away or OSHA recordable cases. The Waste Management Project has achieved 2.5 million hours without a lost away workday. WESF reached a milestone of 500,000 hours worked since the last Lost Workday Case.

Lost Away Workday Case Rate

Cases per 200,000 hours

Project Safe Hours = 2,518,344
FY 2000 = 0.13
FY 2001 to date = 0.00

Green

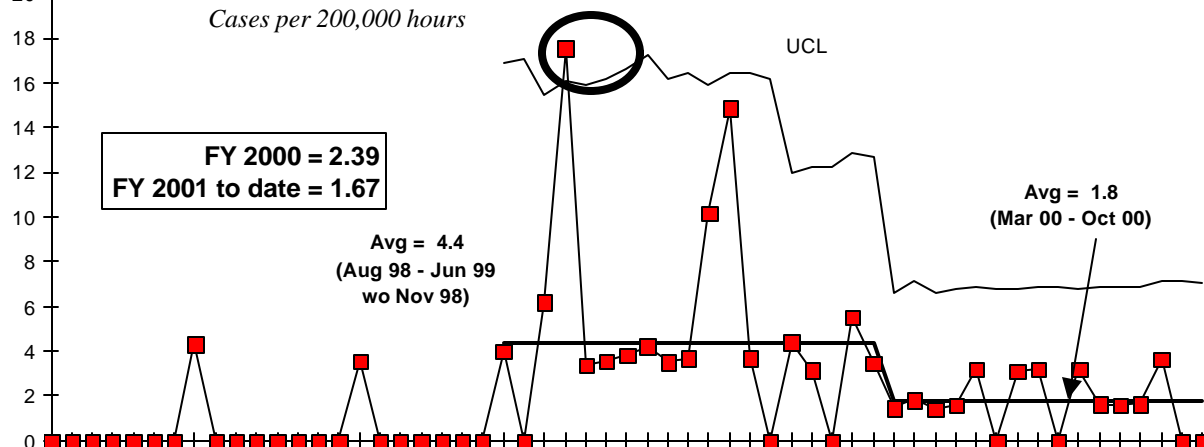


OSHA Recordable Case Rate

Cases per 200,000 hours

FY 2000 = 2.39
FY 2001 to date = 1.67

Green

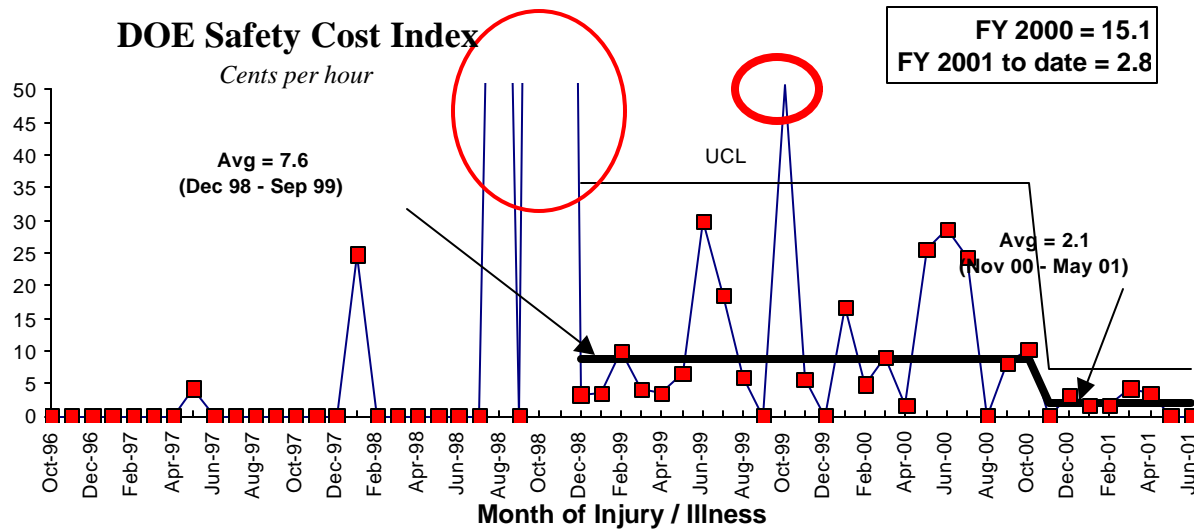


DOE Safety Cost Index

Cents per hour

FY 2000 = 15.1
FY 2001 to date = 2.8

Green



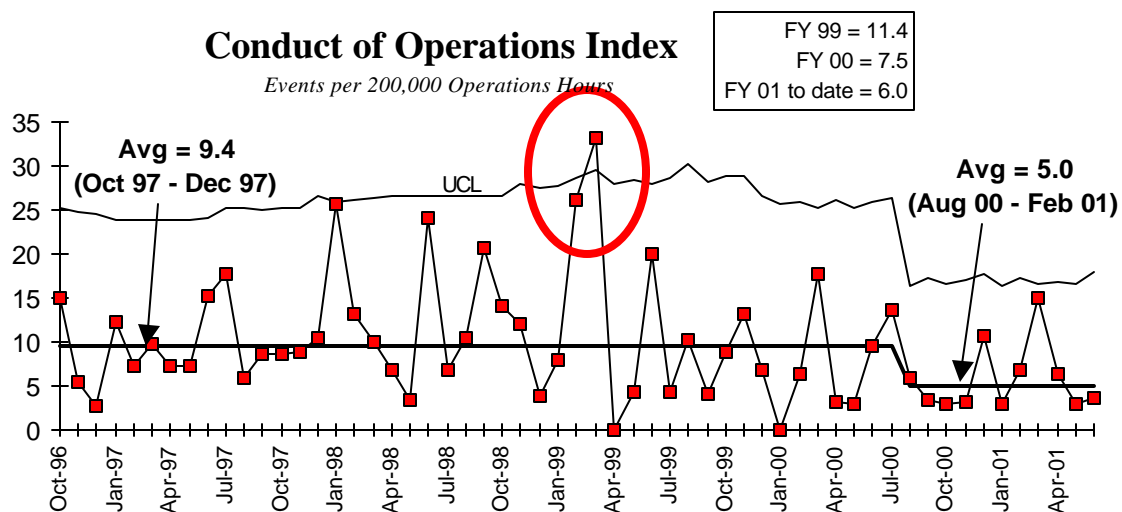
ISMS STATUS

Green

- The draft WM VPP application is available for review and comment by all Project employees. Efforts continue to educate and involve WM employees in the VPP effort through use of the WM VPP TidBits information bulletin and a VPP "Longest Drive" golf competition, which includes answering questions about the VPP tenets. In addition, the VPP Steering Committee is developing informational posters to be provided to projects and facilities.

CONDUCT OF OPERATIONS

Green



BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

Nothing to report at this time.

Opportunities for Improvement

Nothing to report at this time.

UPCOMING ACTIVITIES

MLLW Treatment - ATG continues preparations for a thermal treatment trial burn in September. Limited additional non-thermal and thermal treatment continue.

Accelerate Readiness to Receive Spent Nuclear Fuel K Basin Sludge - By September 30, 2001: 1) Clear 4 T Plant canyon cells; 3) Complete the removal of 4 pieces of major equipment, and 3) Complete contractor Operational Readiness Review.

TRU Waste Retrieval - Retrieval of exposed drums will resume upon revision of the Low-Level Burial Grounds (LLBG) Justification for Continued Operations (JCO) (forecast for early August). Planning for buried drum retrieval continues.

TRU Waste Shipment - The next shipment to WIPP is scheduled for August 23, 2001. The shipment is contingent upon adequate availability of TRUPACT shipping containers due to competing priorities at Idaho National Engineering and Environmental Laboratory (INEEL) and Rocky Flats.

TRU Recertification Audit - Respond as required to the DOE Carlsbad review of the corrective action plans prepared in response to the Recertification Audit.

Liquid Waste Processing – Continue groundwater processing at the 200 Area Effluent Treatment Facility.

NMS Project Support - Continue to receive waste in support of Hanford ash processing through November 2001.

Support to RCP - Continue shipment and placement of D-Cell Hittman liners from the 324 facility in the Low Level Burial Grounds. Support the removal of a Cm/Am source from the 327 facility.

WESF Operations - Complete Hot Cells A through E lay-up in September 2001.

LDR Report - Support resolution of Ecology comments on the LDR report, which are due in August. Ecology will be conducting a site-wide LDR audit as part of their report review.

MILESTONE ACHIEVEMENT

Green

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	3	0	0	0	0	1	0	4
DOE-HQ	0	0	0	0	0	0	0	0
FO	0	0	0	0	0	0	0	0
RL	0	0	0	0	0	0	0	0
Total Project	3	0	0	0	0	1	0	4

Only TPA/EA milestones and all FY 2001 overdue and forecast late milestones are addressed in this report. Milestones overdue are deleted from the Milestone Exception Report once they are completed. The following chart summarizes the FY 2001 TPA/EA milestone achievement and a Milestone Exception Report follows. The last milestone table summarizes the first six months of FY 2002 TPA/EA milestones.

FY 2001 Tri-Party Agreement / EA Milestones		
Number	Milestone Title	Status
M-91-13 (A1C-01-001)	Initiate Disposal of CH-LLWM	Due 06/30/01 – Completed 9/15/1999 Green
M-91-18 (WMP-01-001) EM Management Commitment	Transmit T Plant Sludge Storage Conceptual Design to Ecology	Due 06/29/01 – Completed 6/11/01 Green
M-26-01K	Annual Hanford LDR Report	Due 06/30/01 – Completed 6/28/01 Green
M-26-05H (WMH-00-006)	Prep Biennial Tritium Treatment Technology Evaluation report	Due 08/31/2001 – On schedule. Green

MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
-------------------	--------------	------------------------	----------------------	----------------------

Overdue – 0

Forecast Late – 0

FY 1999 Overdue – 1

TRP-98-709	RL	Complete Hot Cell Deactivation	03/31/99	09/30/01
1.4.2		WESF Facility (A-E)		

Cause: This milestone is not complete due to not being supported at the current funding level.

Impact: No overall impact is expected.

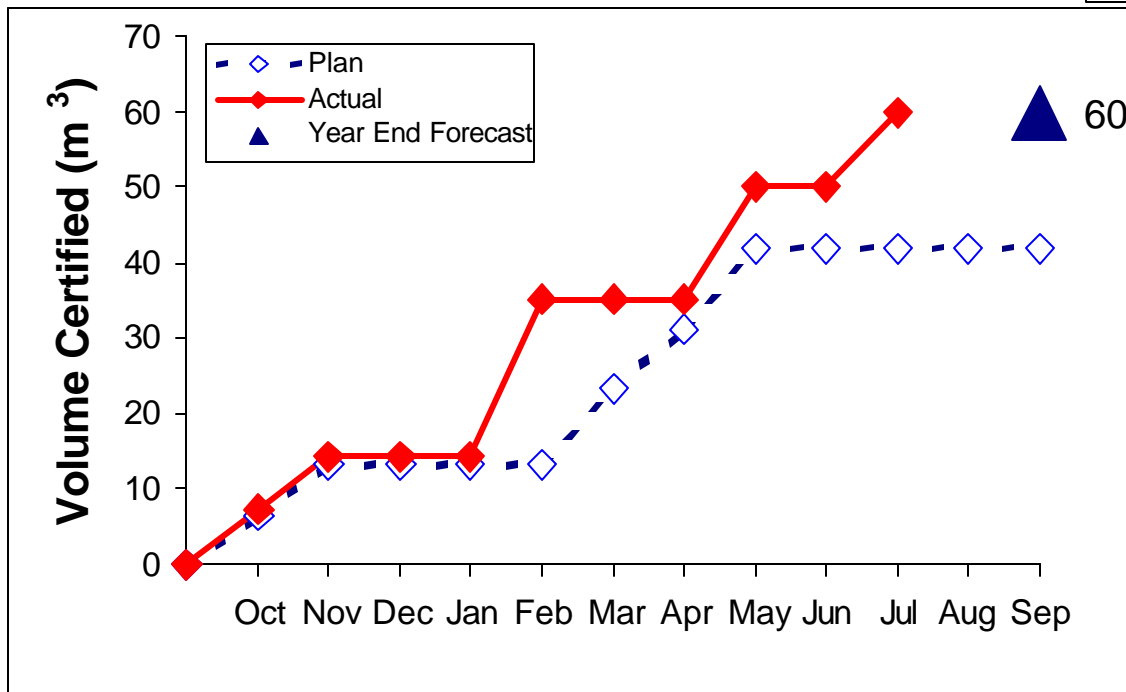
Corrective Action: Funding for this work scope [Return-on-Investment (ROI)] has been identified and a new forecasted completion date of September 30, 2001 established.

FY 2002 Tri-Party Agreement / EA Milestones		
Number	Milestone Title	Status
	Nothing to report at this time.	
DNFSB Commitments		
	Nothing to report at this time.	

PERFORMANCE OBJECTIVES

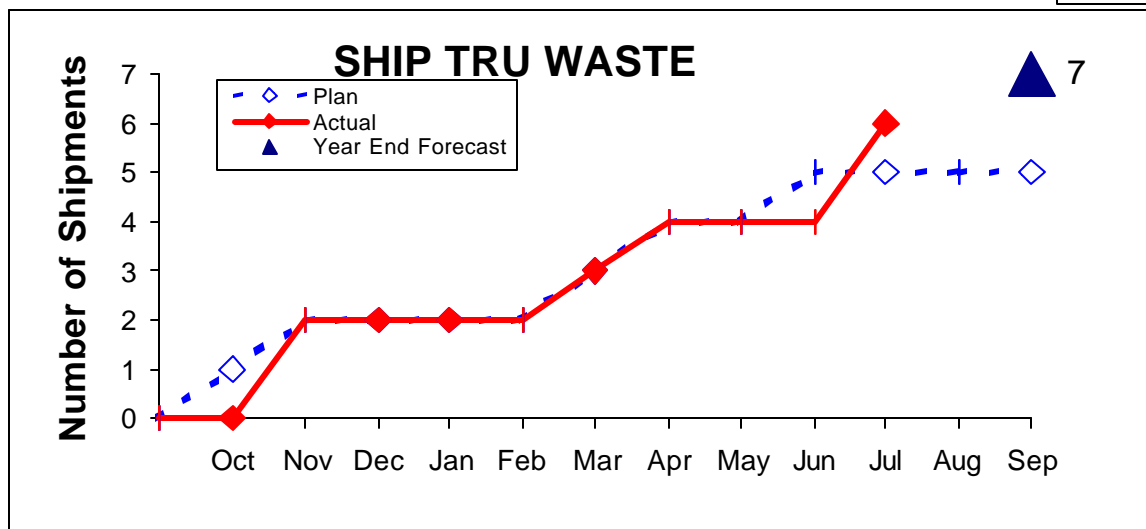
CERTIFY TRU WASTE

Green



Ahead of schedule.

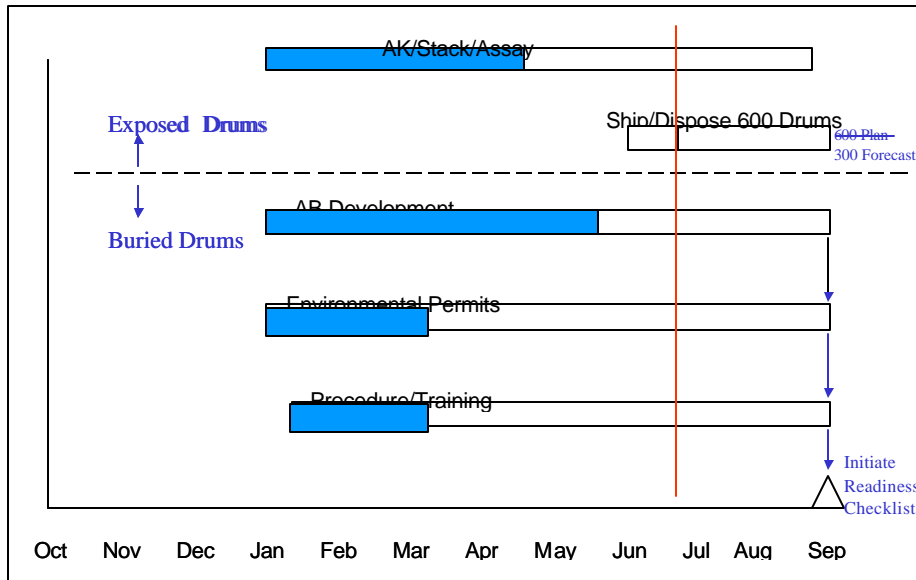
Green



On schedule.

Yellow

RETRIEVE TRU WASTE

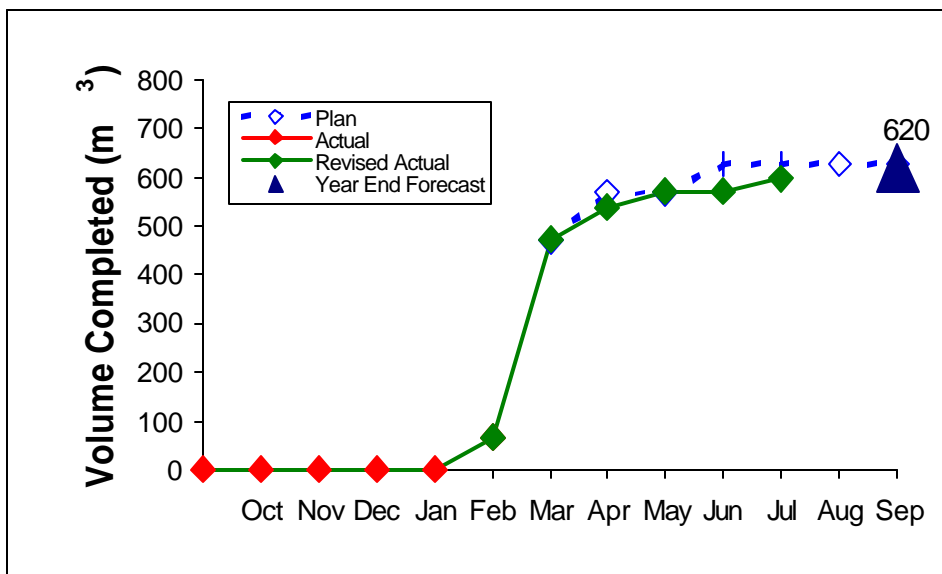


Behind schedule.

- RL approval of JCO (submitted July 13th) needed to resume exposed drum retrieval.
- Budgeted resources needed on board to achieve buried drum retrieval startup by the second quarter of FY 2002.

TREAT AND DISPOSE MLLW

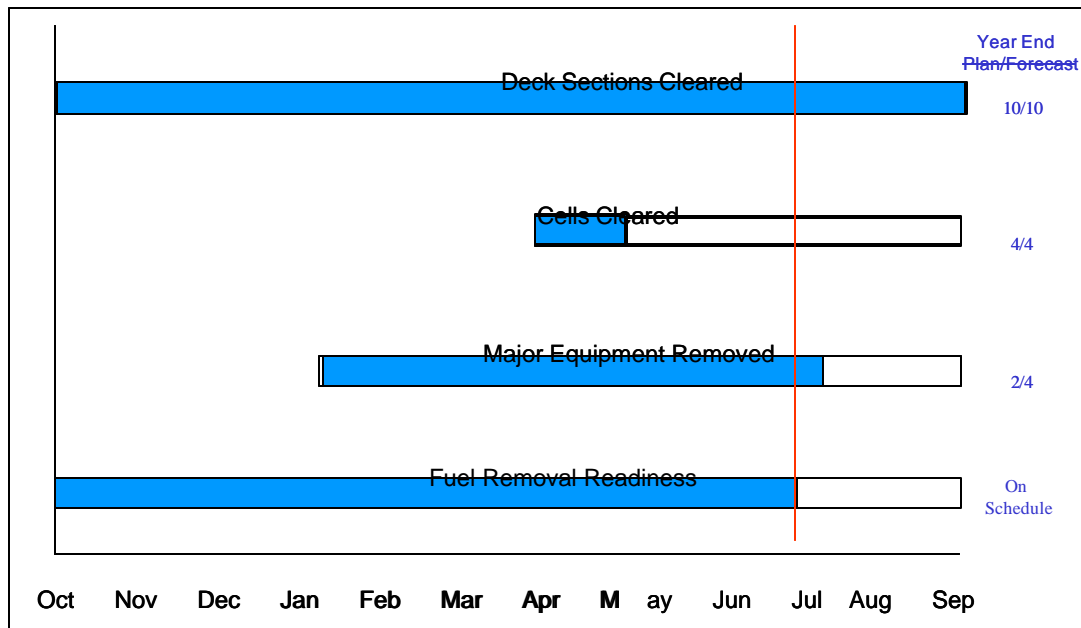
Green



Behind schedule. Recovery in July and August.

ACCELERATE READINESS TO RECEIVE K -BASIN SLUDGE

Green



- Clear 10 deck sections – complete
- Clear 4 cells – Behind schedule due to unexpected tank contents, but still recoverable
- Remove 4 pieces of major equipment – Ahead of schedule; PUREX tower size reduction in process (3rd major piece)
- Fuel removal readiness – Back on schedule, but no float

FY 2001 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES

CUMULATIVE TO DATE STATUS – (\$000)

Green

		FYTD								
	By PBS	BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC
PBS WM03 WBS 1.2.1	Solid Waste Storage & Disposal	\$ 21,452	\$ 21,204	\$ 17,254	\$ (248)	-1%	\$ 3,950	19%	\$ 29,529	\$ 25,135
PBS WM04 WBS 1.2.2	Solid Waste Treatment	\$ 28,161	\$ 28,027	\$ 32,456	\$ (134)	0%	\$ (4,429)	-16%	\$ 39,963	\$ 43,031
PBS WM05 WBS 1.2.3	Liquid Effluents - 200/300 Area	\$ 19,717	\$ 19,642	\$ 17,623	\$ (75)	0%	\$ 2,019	10%	\$ 26,540	\$ 24,765
PBS TP02 WBS 1.4.2	WESF	\$ 7,636	\$ 7,639	\$ 7,436	\$ 3	0%	\$ 202	3%	\$ 10,363	\$ 10,105
Total		\$ 76,966	\$ 76,512	\$ 74,769	\$ (454)	-1%	\$ 1,743	2%	\$ 106,394	\$ 103,036

Note: Above data includes 310/340 Facility Liquid Effluents as part of PBS WM-05.

FY TO DATE SCHEDULE / COST PERFORMANCE

There is no significant schedule variance. The favorable cost variance is primarily due to vacancies and staff on leave in the Liquid Effluents Facilities.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

Schedule Variance Analysis: (-\$0.5M)

Solid Waste Storage & Disposal — 1.2.1/ WM03

Description /Cause: The unfavorable schedule variance of \$0.2M (1 percent) was within the established threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

Solid Waste Treatment — 1.2.2/ WM04

Description /Cause: The unfavorable schedule variance of \$0.1M (0.1 percent) was within the established threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

Liquid Effluents — 1.2.3.1/ WM05

Description /Cause: The unfavorable schedule variance of \$0.08M (0.4 percent) was within the established threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

WESF — 1.4.2/ TP-02

Description /Cause: There is no schedule variance at WESF.

Impact: No Impact.

Corrective Action: No corrective action required.

Cost Variance Analysis: (+\$1.7M)

Solid Waste Storage and Disposal — 1.2.1/WM03

Description and Cause: The favorable \$4M cost variance within WM03 is due to the FY 2000 fee accrual reversal, labor underruns due to involuntary reductions of force and restricted hiring, indirect variance distribution, and savings generated from the WM Program Management Account transfer from indirect to direct.

Impact: None.

Corrective Action: FY00 unearned fee has been used to fund the ATG settlement. A favorable yearend variance is forecasted.

Solid Waste Treatment — 1.2.2/WM04

Description and Cause: The unfavorable \$4.4M cost variance within WM04 is due to a contract modification that required payment to ATG upon shipment of waste, rather than the previous agreement

of payment on return of waste. The prepayment caused a large variance. Also contributing to the variance is the settlement of claims by ATG.

Impact: None.

Corrective Action: A baseline change request was submitted to RL in June, documenting the added scope. The pre-payment variance will be eliminated as waste is returned from ATG.

Liquid Effluents — 1.2.3/WM05

Description and Cause: The favorable \$2.0M cost variance within WM05 is primarily due to labor underruns, reduced sample analysis and a reduced need for crane and rigging.

Impact: None.

Corrective Action: Liquid Effluents is forecasting a favorable cost variance.

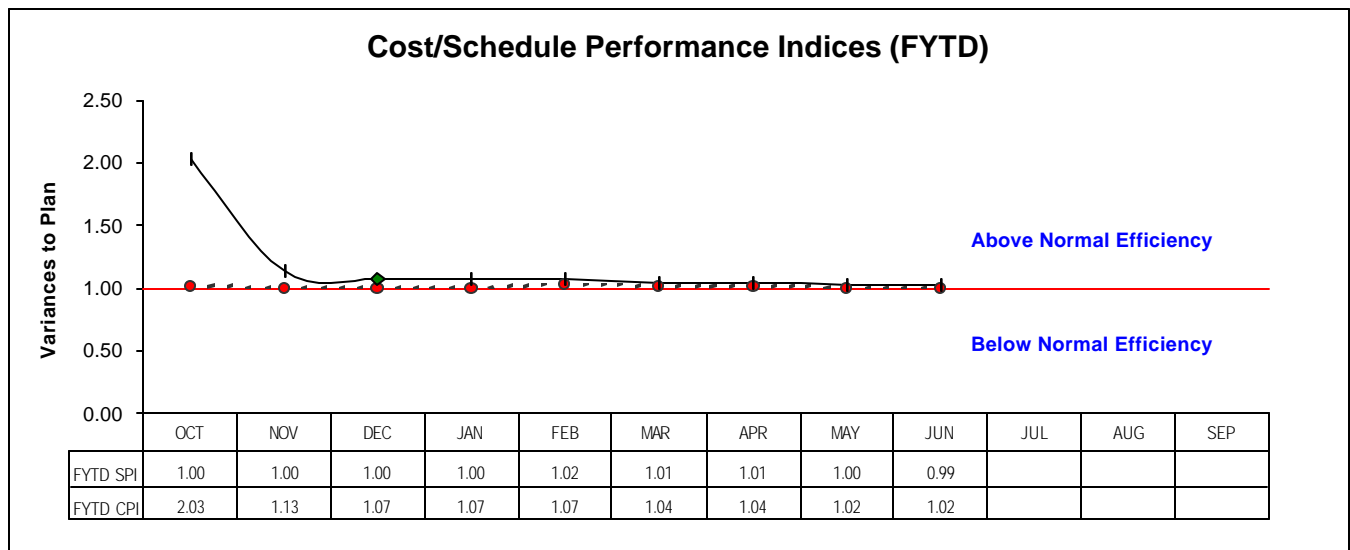
WESF — 1.4.2/TP02

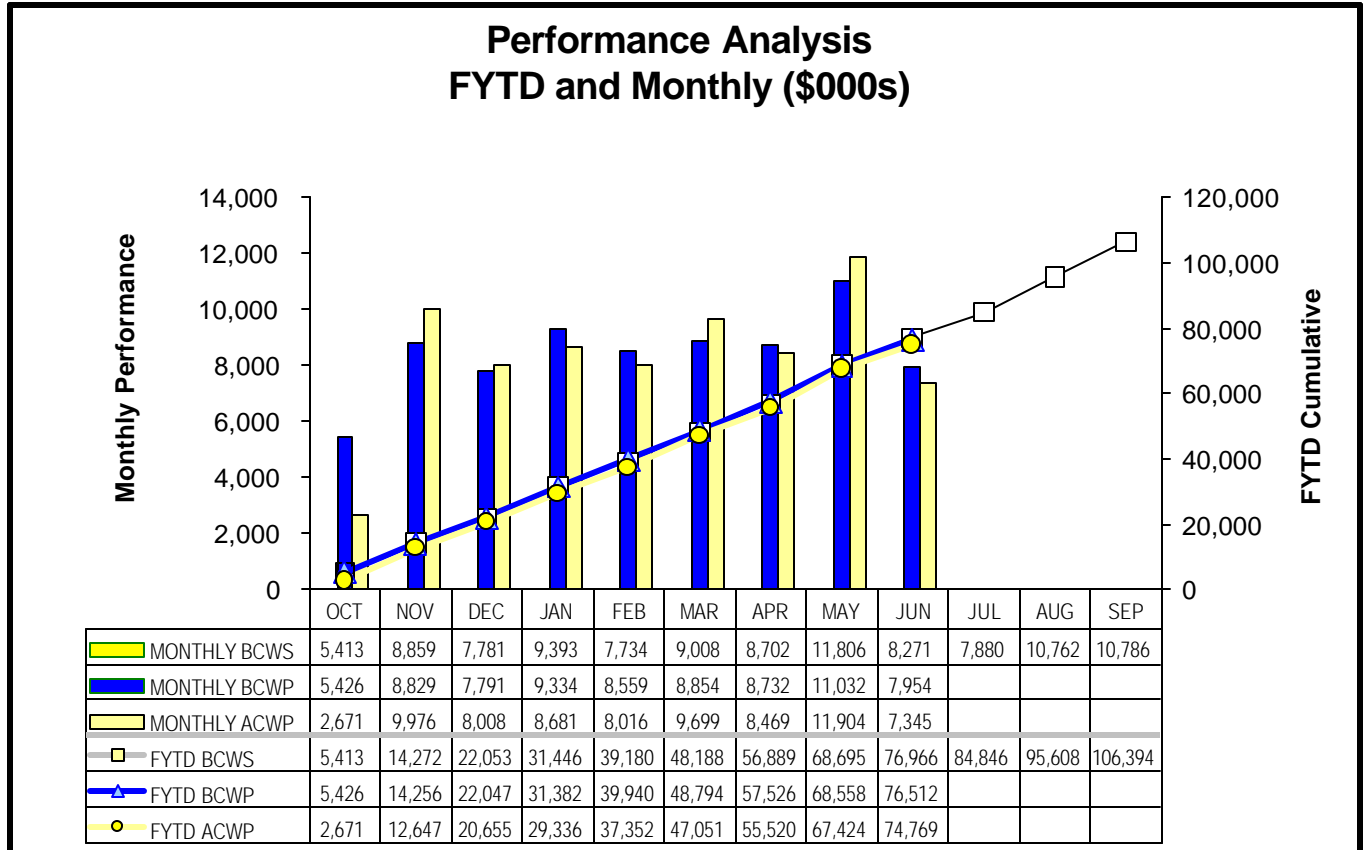
Description and Cause: The favorable \$0.3M cost variance within TP02 was within the established threshold.

Impact: None.

Corrective Action: None.

SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)





Authorized baseline as per the Integrated Planning Accountability, and Budget System (IPABS) – Project Execution Module (PEM).
Note: Above data includes RL contract for Steam.

FUNDS MANAGEMENT — FY 2001 TO DATE

FUNDS VS SPENDING FORECAST (\$000)

Green

	Funds	FYSF	Variance
1.2 Waste Management			
TP02, WM03-WM05			
Post 2006 - Operating	\$ 98,580	\$ 95,453	3,127
Total	\$ 98,580	\$ 95,453	\$ 3,127

NOTE: Above funding addresses Waste Management work scope only.

[Status through June 2001]

ISSUES

Regulatory / Technical / External / DOE Issues / DOE Requests

Technical Issues

T Plant Canyon Cleanout — T Plant Canyon cleanout has been delayed by the discovery, during planned cell visual inspections, of an unanticipated tank containing liquid and salt cake in Cell 11L.

Impact: Canyon activity was suspended and an Unresolved Safety Question (USQ) was declared as a result of the tank discovery. Due to the unknown nature of the tank contents, there is the potential for a nonconformance to the limits of the Criticality Prevention Specification, CPS-D-149-00001 Rev. B-0 and for failure to meet the assumptions of the supporting Criticality Safety Analysis Report, CSAR 86-007.

Corrective Action: Improved estimates of volume and nature of tank contents resulted in reassessment by PRC and determination that no USQ exists. Need for continuation of restrictions on canyon activities will be reassessed by Facility Management and addressed with RL(ABD). Sampling and characterization of tank contents will continue, as will independent effort to document inventory of remaining cells not inspected. This item will be updated when Cell 11-L's contents and remaining cells' inventory are completed.

Exposed TRU Drum Retrieval — The frequency of occurrence of unvented drums containing in excess of 15 grams plutonium is higher than assumed in the Low Level Burial Ground Justification for Continued Operation (JCO). Retrieval operations were suspended when two unvented drums above the RL-imposed limit for Trench 29 were discovered during retrieval operations in Trench 1 on May 31, 2001.

Impact: Limited drum movement has resumed in trench 29, while trench 20 remains in stand-by, and trenches 1 and 24 remain in restricted status.

Corrective Action: A new JCO was prepared and submitted to RL on July 13, 2001 to allow resumption of exposed drum retrieval in Trenches 1, 20, 24, and 29. Subcontractor remobilization and resumption of retrieval is tentatively planned for early August based on RL progress in evaluating the JCO.

DOE Issues

Accelerate Readiness to receive Spent Nuclear Fuel (SNF) Sludge at T Plant — FH's schedule for readiness to remove Shippingport fuel from T Plant has been impacted due to a delay in issuance of the Safety Evaluation Report (SER) governing these activities (completed June 18, 2001).

Impact: Initiation of critical portions of the FH Management Self-Assessment (MSA) was delayed from May 22 until June 18, 2001. Subsequent readiness activities (MSA, Contractor ORR and RL ORR) must all be compressed to support timely fuel removal.

Corrective Action: The MSA is complete and FH has declared its readiness to begin the contractor ORR as scheduled on July 30, 2001. Continued RL support through the ORR process will be needed to support timely fuel movement startup on November 12, 2001.

Regulatory Issues, External Issues and DOE Requests

None identified at this time.

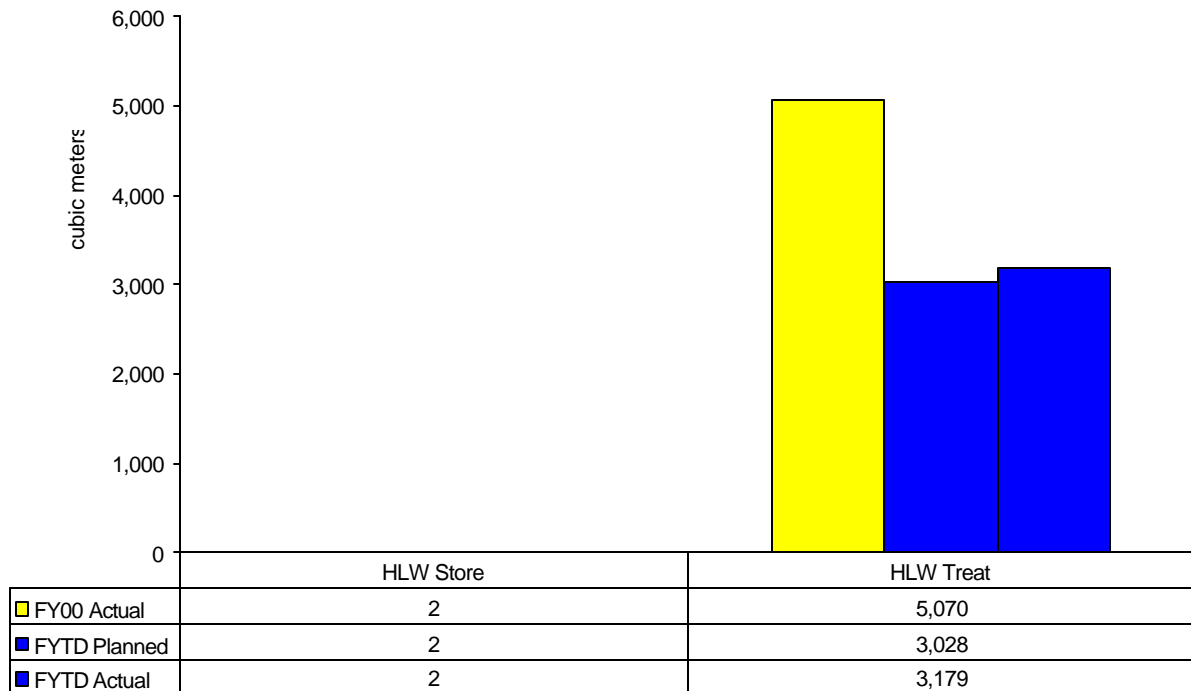
BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	FY01 COST IMPACT \$000	S C H	T E C H	DATE TO CCB	CCB APR'VD	RL APR'VD	CURRENT STATUS
WM-2001-027	6/12/2001	ATG Settlement	\$3,608			6/21/2001	6/25/2001	TBD	
WM-2001-028	6/13/2001	T Plant Fans/Pre-Filters	\$1,066			6/21/2001	6/25/2001	NA	Approved
ADVANCE WORK AUTHORIZATIONS									

KEY INTEGRATION ACTIVITIES

- **SNF Project Support** — Prepare T Plant to receive SNF K-Basin sludge.
- **Liquid Effluents** — Continue support of UP-1 Groundwater treatment at the 200 Area Effluent Treatment Facility.
- **RCP Support** —Continue support to RCP for the removal of waste from the 324 and 327 buildings as well as removal of uranium elements from the 300 area.
- **NMS Project Support** – Continue support to the NMS Project for the removal of waste from the PFP.

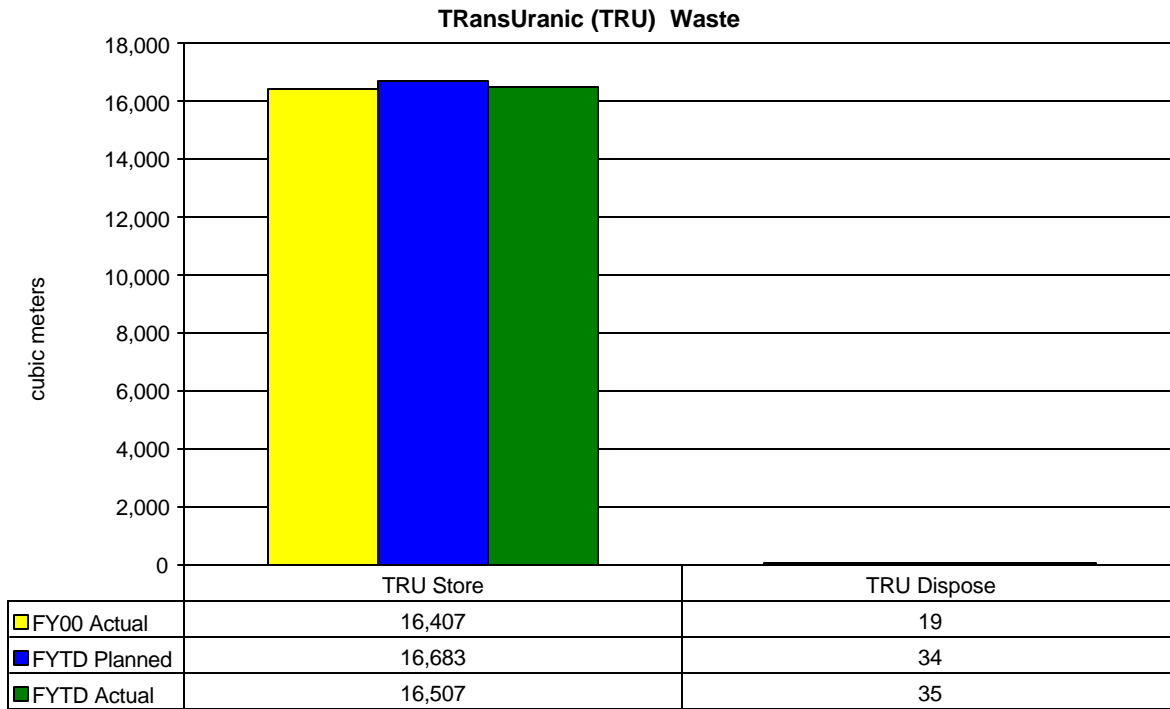
High Level Waste (HLW): Storage and Treatment



Storage: Storage continues to be provided for HLW Cesium 137 and Strontium 90 capsules in the Waste Encapsulation and Storage Facility Pool Cells.

Treatment: No campaign to process HLW at the 242A Evaporator was planned or performed during the 3rd quarter of FY01.

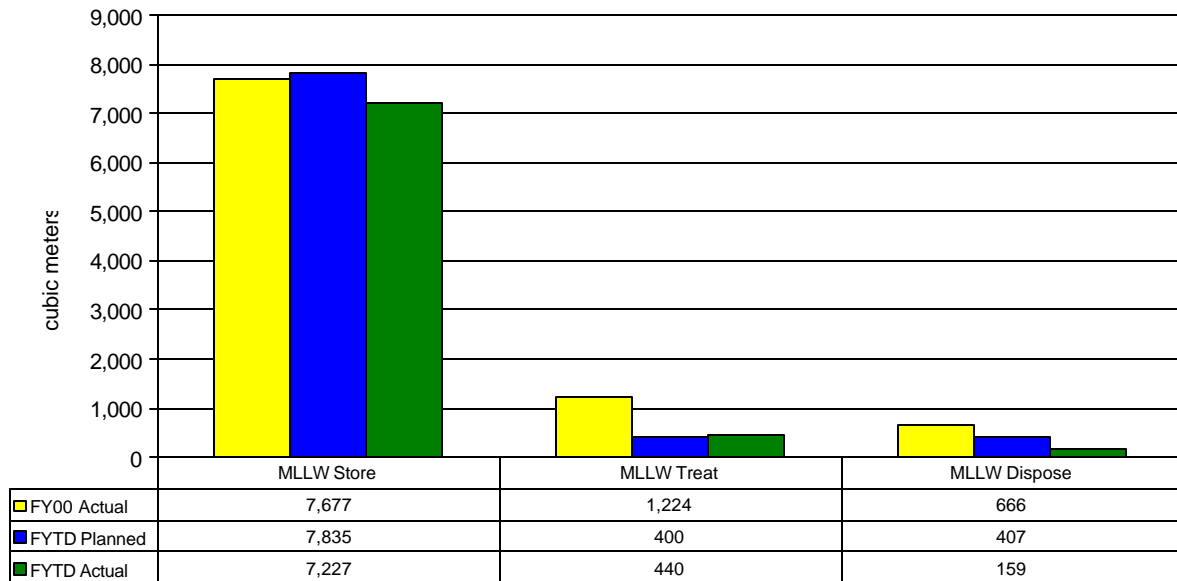
TRANSURANIC (TRU) WASTE: STORAGE, TREATMENT AND DISPOSAL



Storage: Storage continues to be provided for existing and newly generated TRU waste.

Disposal: TRU shipments to Waste Isolation Pilot Plant (WIPP) is on schedule.

MIXED LOW LEVEL WASTE: STORAGE, TREATMENT, AND DISPOSAL

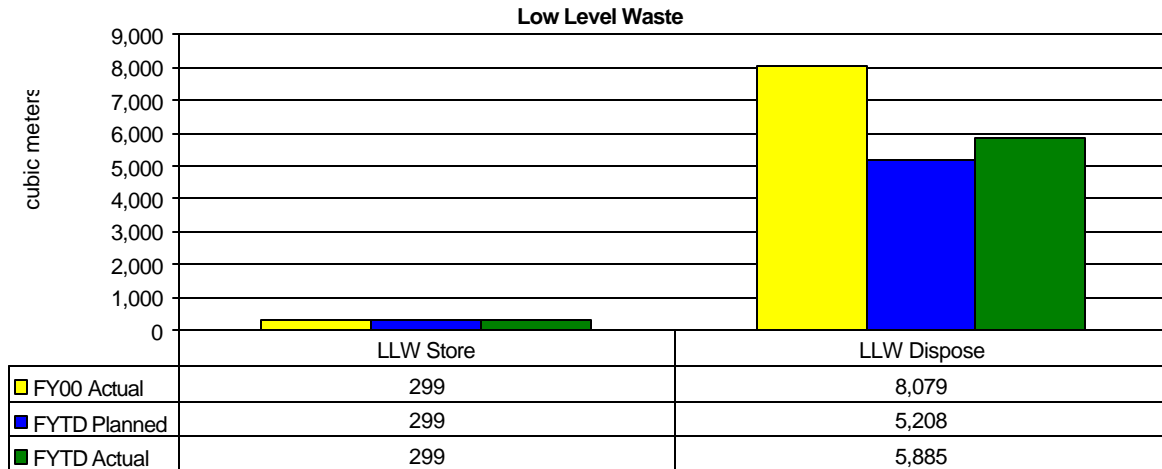


Storage: Storage continues to be provided for existing and newly generated MLLW waste. The current volume of MLLW in storage is within 10% of the planned amount.

Treatment: Treatment of MLLW is on schedule.

Disposal: Scheduled disposal volumes for FY01 are based on pre-treatment volume while the actual disposal value recorded is post-treatment. Currently there is a greater than 2:1 reduction ratio.

LOW LEVEL WASTE (LLW): STORAGE, TREATMENT, AND DISPOSAL



Storage: Storage continues to be provided for LLW that does not meet waste acceptance criteria for disposal in the burial grounds.

Disposal: The LLW received from onsite and offsite generators were disposed in the burial ground. LLW receipt and disposal are higher than planned due to the continued shipping from Parks Township.